

TRAINING PROGRAM OF INSTRUCTION (TPI)
FOR
AFIS-BSP
BASIC STILL PHOTOGRAPHY COURSE



Approved by:

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TRAINING PROGRAM OF INSTRUCTION

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TRAINING PROGRAM OF INSTRUCTION

Preface

TRAINING PROGRAM OF INSTRUCTION FILE NUMBER (TPFN): AFIS-BSP

TITLE: Basic Still Photography

TRAINING LOCATION: Defense Information School, Ft Meade, MD

SPECIALTY AWARDED:	USA:	25V (after successful completion of AFIS-VPD)
	USN	Photographer's Mate (PH)
	USAF	3V032, Still Photographic Apprentice
	USMC	4641, Combat Photographer

PURPOSE: To provide entry-level training in the basic fundamentals of still photography and electronic imaging techniques.

COURSE DESCRIPTION: This course provides instruction in theory and application of photographic fundamentals, captioning, chemistry, optics, sensitized materials, light sources, exposing, processing, and printing black and white negatives, camera operations for standard and studio photography, exposing, processing, and printing color negatives, quality control, and sensitometric procedures. Electronic imaging including digital cameras, scanning hardware and software, imaging and graphic software, image transmission, archiving, and editing are trained in theory and hands-on applications.

PREREQUISITES:	USA	ASVAB EL score and GT score of 95 or higher; distant visual acuity correctable to 20/20, with normal color vision; must follow on to AFIS-VPD course; must be eligible for secret clearance
	USN	Combined ASVAB WK/AR or VE/AR of 104; distant visual acuity correctable to 20/20 with normal color vision; must be eligible for secret clearance
	USAF	AFAQE score of 43; distant visual acuity correctable to 20/20 with normal color vision; must be eligible for secret clearance
	USMC	GT score of 100 or higher; distant visual acuity correctable to 20/20 with normal color vision; must be eligible for secret clearance

SPECIAL PREREQUISITES: None

GRADE PREREQUISITES:	USA:	E-1 – E-6
	USN:	E-1 – E-6
	USAF:	E-1 – E-7
	USMC:	E-1 – E-5
	Civilian personnel:	As determined by need of agency.

SECURITY CLEARANCE: N/A

CLASS SIZE:

MAXIMUM 24

MINIMUM 8

ANNUAL COURSE CAP 408

COURSE LENGTH: 68 Days

ACADEMIC HOURS: 542 Hrs

ADMINISTRATIVE HOURS: 2 Hrs

TOTAL COURSE HOURS: 544 Hrs

INSTRUCTOR CONTACT HOURS: 1,789 Hrs

TYPE/METHOD OF INSTRUCTION:

1. Lecture (L) 78.5 Hrs

2. Performance Exercise (PE) 375 Hrs

3. Demonstration (D) 28.5 Hrs

4. Computer Assisted Instruction (CAI) 6 Hrs

5. Examination (E) 54 Hrs

- Performance Examination (EP) 40 Hrs

- Written Examination (EW) 14 Hrs

6. Administrative Hours (AD) 2 Hrs

TRAINING START DATE: Sept 2002

ENVIRONMENTAL IMPACT: None. DoD policy was followed to assess the environmental impact.

MANPOWER: The Interservice Training Review Organization (ITRO) formula was used to determine the number of instructors required.

EQUIPMENT AND FACILITIES: The Course Design Resource Estimate (CDRE) contains this information.

TRAINING DEVELOPMENT PROPONENT: American Forces Information Service, Training Directorate, (AFIS/TD): (703) 428-0707; DSN 328-0707.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-001-

UNIT TITLE: Orientation

TPFN HOURS AND TYPE: 6L

TPFN TOTAL HOURS: 6

PREREQUISITE TPFN: None

TASK(S): 001 Student orientation.

SUMMARY OF INSTRUCTION: The student will be introduced to school policies and procedures, provided an overall synopsis of the training curriculum, and given a tour of the school.

REFERENCE:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals Study Guide and Workbook"

INSTRUCTOR/STUDENT RATIO: 1:24 (L)

SAFETY FACTORS: N/A

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-002-

UNIT TITLE: Safety

TPFN HOURS AND TYPE: 4L

TPFN TOTAL HOURS: 4

PREREQUISITE TPFN: AFIS-BSP-001-001

TASK(S):

001	Define the right to know statement.
002	Describe Material Safety Data Sheet (MSDS) contents and usage.
003	Identify Environmental Protection Standards (EPA Standards).
004	Describe safety precautions to be followed when working with chemical, electrical, mechanical, and physical hazards.

SUMMARY OF INSTRUCTION: Students are provided Material Safety Data Sheets for all chemicals in the course and must verify in writing that they have read and understand the MSDS's. Students identify Environmental Protection Standards as applicable to the Visual Information career field. Students are trained on all safety issues and precautions used in the course. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals Study Guide and Workbook"

DoD Instruction 6055.1, "DoD Safety and Occupational Health Program"

DoD Instruction 6050.5, "DoD Hazard Communication Program"

Hazardous Material Information System

INSTRUCTOR/STUDENT RATIO: 1:24(L)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-003-

UNIT TITLE: Security

TPFN HOURS AND TYPE: 2L

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: AFIS-BSP-001-002

TASK(S):

001	Identify physical security procedures.
002	Identify the correct area of application of Operations Security (OPSEC).
003	Identify the correct procedures for marking and distributing classified material and handling sensitive items.
004	Describe the key elements of communications security.

SUMMARY OF INSTRUCTION: Students learn physical and operational security procedures as applicable to the Visual Information career field including marking and distribution of classified photographs and classification authority. Levels of security including Top Secret, Secret, and Confidential will be discussed. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

DoD Directive 5200.1, "DoD Information Security Program"
DoD Directive 5200.8, "Security of DoD Installations and Resources"
AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals Study Guide and Workbook"

INSTRUCTOR/STUDENT RATIO: 1:24(L)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-004-

UNIT TITLE: Visual Information (VI) Laboratory Administration

TPFN HOURS AND TYPE: 1L, .5D, 1.5PE

TPFN TOTAL HOURS: 3

PREREQUISITE TPFN: AFIS-BSP-001-003

TASK(S):

001	Prepare, maintain, and use a generic VI work request and work request log.
002	Use equipment operating manual.
003	Identify disposition procedures for visual information records and photography.
004	Identify proper customer interaction procedures.
005	Identify ethical standards.
006	Identify related photographic references, publications, sources, and Photo-Lab Index.

SUMMARY OF INSTRUCTION: Students learn how to operate a Visual Information facility to include maintaining required forms and documentation. Students will complete a practical exercise on a generic work order. Customer service, guidelines for ethical versus unethical work orders and the Photo Lab Index will be discussed. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

DoD Directive 5040.2, "Visual Information"

DoD Directive 1300.7, "Training and Education Measures Necessary to Support the Code of Conduct"

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals Study Guide and Workbook"

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-005-

UNIT TITLE: Captions

TPFN HOURS AND TYPE: 1L, 1PE

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: AFIS-BSP-001-004

TASK(S): 001 Prepare DoD caption sheet.
 002 Write captions.
 003 Use VIRIN number.

SUMMARY OF INSTRUCTION: Students learn the 15 character VIRIN format, components of a proper caption, and will be introduced to the VI standard software used for captioning. A practical exercise will be conducted producing a caption labeled with the student's individual VIRIN number. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"
The Associated Press Stylebook and Libel Manual

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1

B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-006-

UNIT TITLE: Light Theory

TPFN HOURS AND TYPE: 2 (CAI)

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: AFIS-BSP-001-005

TASK(S): 001 Identify the basic facts about the theory of light.

SUMMARY OF INSTRUCTION: Students will be taught the basic facts about the theory of light and the visible portion of the electromagnetic spectrum as it relates to vision and film sensitivity. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"

Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (CAI)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1

B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-007-

UNIT TITLE: Exposure

TPFN HOURS AND TYPE: 1.5L, 1D, 4.5PE

TPFN TOTAL HOURS: 7

PREREQUISITE TPFN: AFIS-BSP-001-006

- TASK(S)**
- 001 Identify the basic facts about the theory of exposure.
 - 002 Determine equivalent exposure.
 - 003 Use exposure data guide charts to determine exposure.
 - 004 Explain push/pull process for film.

SUMMARY OF INSTRUCTION: Students will be taught the basic facts about the theory of exposure and learn to determine equivalent exposures with shutter speed and f-stop combinations. Basic daylight exposure using the “sunny 16” method will be taught. Students also learn to expose film at a higher film speed rating than normal, and then are taught how to compensate for the resulting underexposure by giving greater development than normal. A practical exercise including exposure and processing of black and white will be conducted. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, “B & W Photographic Fundamentals, Study Guide and Workbook”
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1

B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-008-

UNIT TITLE: B&W Film Characteristics

TPFN HOURS AND TYPE: 2L

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: AFIS-BSP-001-007

TASK(S): 001 Describe the characteristics of panchromatic B&W film.

SUMMARY OF INSTRUCTION: Students will be taught the physical construction and exposure characteristics of panchromatic and orthochromatic B&W negative film. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"

Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1

B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-009-

UNIT TITLE: Camera Operations

TPFN HOURS AND TYPE: 1.5L, 1D, 3.5PE

TPFN TOTAL HOURS: 6

PREREQUISITE TPFN: AFIS-BSP-001-008

- TASK(S):**
- 001 Explain basic operations of a small format (35mm) camera.
 - 002 Use slate to identify film.
 - 003 Expose film under daylight conditions using reflectance light metering techniques.
 - 004 Perform operator maintenance on a small format camera.

SUMMARY OF INSTRUCTION: Students will be taught basic operation of a small format (35mm) camera, how to expose film under daylight conditions, and how to perform operator-level maintenance on a small format camera. A practical exercise will be conducted to check learning and reinforce concepts of exposure and film characteristics, and 35mm camera operation. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-010-

UNIT TITLE: B&W Film Processing

TPFN HOURS AND TYPE: 1.5L, 1D, 5.5PE

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-001-009

TASK(S):

001	Identify the characteristics of B&W developers, stop baths, and fixing baths.
002	Load film for processing on to reels.
003	Select film and developer combination.
004	Process film in tanks.
005	Process film by using the time/temperature method.
006	Develop film by using the push/pull process.

SUMMARY OF INSTRUCTION: Students will be taught the characteristics of photographic chemicals and basic chemical mixing methods for black and white processing. Safety will be stressed in all aspects of chemical mixing and use. Students will use the time and temperature method of tank and reel processing for black and white film. Push processing of film will be taught with black and white film. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"

Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-011-

UNIT TITLE: Filters

TPFN HOURS AND TYPE: 1L, 3PE

TPFN TOTAL HOURS: 4

PREREQUISITE TPFN: AFIS-BSP-001-010

TASK(S):

001	Identify the effects and limitations of filters.
002	Determine exposure compensation for filters.
003	Select and use correction, contrast, neutral density, polarizing, and haze/ultraviolet filters.

SUMMARY OF INSTRUCTION: Students will learn to identify effects and limitations of photographic filters for black and white film. A performance exercise will be conducted to reinforce learning using polarizing, correction, and neutral density filters as well as film processing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-012-

UNIT TITLE: B&W Printing

TPFN HOURS AND TYPE: 1.5L, 1D, 15.5PE

TPFN TOTAL HOURS: 18

PREREQUISITE TPFN: AFIS-BSP-001-011

- TASK(S):**
- 001 Identify the characteristics of printing materials, use of safelight filters, and different types of B&W printing paper.
 - 002 Prepare B&W print processing solutions.
 - 003 Produce B&W proof prints from enlargers and apply manual methods for processing print materials.
 - 004 Select negatives for printing and determine exposure from test.
 - 005 Select appropriate lens for printing, crop negatives for composition, and control contrast.
 - 006 Apply exposure correction techniques of dodging and burning-in.
 - 007 Use B&W processing machines to process print materials.
 - 008 Perform operator maintenance on printing, processing, and finishing equipment.
 - 009 Use finishing techniques to mount prints.

SUMMARY OF INSTRUCTION: Students learn the characteristics of B&W printing materials and the main types of enlargers as well as the use of a condenser enlarger. There will be practical exercises to test learning and reinforce concepts. The students will produce B&W prints using a variety of corrective techniques, including dodging, burning, and contrast control to enhance printed images, during the practical exercises. Tray processing of black and white prints will be demonstrated and students will learn methods for machine processing of exposed prints and correct operator maintenance on equipment used during the exercise. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-013-

UNIT TITLE: Composition

TPFN HOURS AND TYPE: 1.5L; 2 CAI; 1D, 10.5PE

TPFN TOTAL HOURS: 15

PREREQUISITE TPFN: AFIS-BSP-001-012

TASK(S): 001 Identify the basic elements of composition.
002 Apply the basic elements of composition to enhance images.

SUMMARY OF INSTRUCTION: Students will be taught how to use the basic elements of composition to enhance photographic images and proper light metering techniques and applications. Composition training will include basic elements including rule of thirds, framing, balance, perspective, and types of lines. There will be a practical exercise to reinforce learning on composition, film processing, and enlarger printing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 1 (Ref: 001-014).

REFERENCES:

AFIS-BSP, Functional Area 1, "B & W Photographic Fundamentals, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (L, D, CAD); 1:6 (PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 1
B&W PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-001-014-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW, 6EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-001-001 to -013

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 001-002 through TPFN AFIS-BSP 001-011. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum score of 70% on the written test. A minimum of 70% must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 1, "Fundamentals of Photography I, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton
DoD Directive 5040.2, "Visual Information"
DoD Instruction 6050.5, "DoD Hazard Communication Program"
DoD Directive 5200.1, "DoD Information Security Program"
DoD Directive 5200.8, "Security of DoD Installations and Resources"
DoD Directive 6055.1, "DoD Safety and Occupational Health Program"
DoD Directive 1300.7, "Training and Education Measures Necessary to Support the Code of Conduct"

INSTRUCTOR/STUDENT RATIO: 1:24(EW); 1:6(EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-001-

UNIT TITLE: Color Theory

TPFN HOURS AND TYPE: 1.5L, 3.5PE

TPFN TOTAL HOURS: 5

PREREQUISITE TPFN: None

TASK(S):

001	Identify the theory of light and color.
002	Identify the principles and physical characteristics of color negative and reversal film.
003	Describe the use of light balancing, color conversion, and color compensating filters.

SUMMARY OF INSTRUCTION: Students will learn the additive and subtractive light theories, and how the light spectrum affects color film. Students will learn the principles and characteristics of exposing color negative and reversal film materials as well as the use of filters with color negative film. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Fundamentals of Photography II, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-002-

UNIT TITLE: Expose and Process Color Film

TPFN HOURS AND TYPE: 2L, 1D, 15PE

TPFN TOTAL HOURS: 18

PREREQUISITE TPFN: AFIS-BSP-002-001

- TASK(S):**
- 001 Expose color negative film under daylight and fluorescent lighting conditions.
 - 002 Identify the components and operation of automated film processors.
 - 003 Attach film to leader tab to process film.
 - 004 Use processing machines to process exposed negative film.

SUMMARY OF INSTRUCTION: Students will learn the principles and characteristics of exposing color film materials. They will learn the film processing steps prior to processing color negative film with automatic processors. A practical exercise will be conducted to check learning and reinforce concepts of exposure and automated processing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Fundamentals of Photography II, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-003-

UNIT TITLE: Lens and Depth of Field

TPFN HOURS AND TYPE: 1.5L, 1D, 4.5PE

TPFN TOTAL HOURS: 7

PREREQUISITE TPFN: AFIS-BSP-002-002

TASK(S):

- 001 Identify the principles of photographic lenses.
- 002 Use lenses (normal, wide angle, telephoto and zoom) to control image size.
- 003 Adjust lens for depth-of-field/focus.

SUMMARY OF INSTRUCTION: Students learn how lenses form an image, types of lenses including wide angle, normal, long focal length, macro, mirror, zoom lenses and how focal length affects angle of view and magnification of lenses. After learning the principles of photographic lenses, a practical exercise will be conducted to check learning and reinforce concepts of the changes in image size and depth of field when using different lenses. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Fundamentals of Photography II, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-004-

UNIT TITLE: Custom Color Printing

TPFN HOURS AND TYPE: 1.5L, 1D, 13.5PE

TPFN TOTAL HOURS 16

PREREQUISITE TPFN: AFIS-BSP-002-003

TASK(S):

001	Identify the characteristic of color print paper.
002	Identify methods of storing and preserving sensitized materials and photographic chemistry.
003	Identify the components and operation of automated paper processors and manual color enlargers.
004	Produce custom color prints using manual methods.
005	Evaluate prints for color balance using viewing filters and reflective densitometers.

SUMMARY OF INSTRUCTION: Students learn the characteristics of color print paper, and identify the methods of storing and preserving sensitized materials and chemicals. They are taught the basic facts of mixing chemicals for color paper. Students learn to produce color prints using manual enlargers with subtractive filtering techniques. Students are taught color correction using a gray card reference, viewing filters and the trial and error method. Prints will be-processed using automated methods. A practical exercise will be conducted to check learning and reinforce concepts of color printing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Color Photographic Fundamentals , Study Guide and Workbook"

Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-005-

UNIT TITLE: Electronic Flash

TPFN HOURS AND TYPE: 3L, 2D, 25PE

TPFN TOTAL HOURS: 30

PREREQUISITE TPFN: AFIS-BSP-002-004

TASK(S):

001	Identify the basic facts about electronic flash.
002	Expose film using flash guide numbers.
003	Use direct and off-camera flash techniques.
004	Use diffuser, bounce, synchro-sun, and fill flash techniques.

SUMMARY OF INSTRUCTION: Students learn basic facts about electronic flash and how to calculate exposure using flash guide numbers and automatic methods. Students learn to expose color film by the use of various flash techniques including direct, bounce, off camera, and synchro-sun. A practical exercise will be conducted to check learning and reinforce concepts of electronic flash techniques. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Color Photographic Fundamentals, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR PHOTOGRAPHIC FUNDAMENTALS

TPFN: AFIS-BSP-002-006-

UNIT TITLE: Automated Color Printing

TPFN HOURS AND TYPE: 1.5L, 1D, 13.5PE

TPFN TOTAL HOURS: 16

PREREQUISITE TPFN: AFIS-BSP-002-005

TASK(S): 001 Identify the components and operation of an automated printer-processor.
002 Produce color prints using an automated printer-processor.

SUMMARY OF INSTRUCTION: Students are taught the main components of an automatic printer processor as well as basic techniques and procedures for printing and color correcting color negatives using automated methods. A practical exercise will be conducted to check learning and reinforce concepts of automated color printing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Color Photographic Fundamentals, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2
COLOR RAPHC FUNDAMENTALS

TPFN: AFIS-BSP-002-007-

UNIT TITLE: Awards and Presentations

TPFN HOURS AND TYPE: 1.5L, 1D, 9.5PE

TPFN TOTAL HOURS: 12

PREREQUISITE TPFN: AFIS-BSP-002-006

TASK(S): 001 Photograph awards and presentations.
002 Photograph groups.

SUMMARY OF INSTRUCTION: Students will learn how to photograph awards and presentations with simulated ceremonies. A practical exercise will be conducted to check learning and reinforce concepts of award and presentation photography and automated color printing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 2 (Ref: 002-008).

REFERENCES:

AFIS-BSP, Functional Area 2, "Color Photographic Fundamentals, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (L); 1:6 (PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 2

PHOTOGRAPHIC FUNDAMENTALS II

TPFN: AFIS-BSP-002-008-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW, 6EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-002-001 to -007

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 002-001 through TPFN AFIS-BSP 002-007. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 2, "Color Photographic Fundamentals, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 3
PHOTOGRAPHIC ASSIGNMENTS

TPFN: AFIS-BSP-003-001-

UNIT TITLE: Investigative and Documentary Photography

TPFN HOURS AND TYPE: 6L, 1D, 24PE

TPFN TOTAL HOURS: 31

PREREQUISITE TPFN: None

TASK(S):

001	Photograph Material Deficiency Reports (MDR) using macro lens and ring light flash.
002	Photograph legal and criminal investigations.
003	Photograph training activities.
004	Photograph aircraft/ground mishap.
005	Identify procedures to be considered when performing medical and intelligence photography.
006	Produce color prints using an automated printer-processor.

SUMMARY OF INSTRUCTION: Students will learn to use special lighting (ring-light and macro lens) to photograph deficient/damaged equipment. Students will learn the step-by-step procedures for legal/criminal investigative photography. Students will learn the principles of photographing training as well as accidents, to include aircraft/ground mishaps and the considerations of medical and intelligence photography. Practical exercises will be conducted to check learning and reinforce concepts of documentary photography and automated color printing. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 3 (Ref: 003-004).

REFERENCES:

AFIS-BSP, Functional Area 3, "Photographic Assignments, Study Guide and Workbook" Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 3 PHOTOGRAPHIC ASSIGNMENTS

TPFN: AFIS-BSP-003-002-

UNIT TITLE: Certification of Automated Color Printer-Processors

TPFN HOURS AND TYPE: 1.5L, 1D, 17.5PE

TPFN TOTAL HOURS: 20

PREREQUISITE TPFN: AFIS-BSP-003-001

TASK(S):

001	Identify daily start-up and shutdown procedures for a processor.
002	Process control strip, read control strip on densitometer, interpret control strip data, plot data on Y-55, and certify processor.
003	Reference Z manuals to adjust process to certify processor.
004	Identify procedures to set up/adjust master balance channel.
005	Identify procedures to set up/adjust master slope control.

SUMMARY OF INSTRUCTION: As part of the Quality Assurance process, students learn techniques and procedures to produce controlled results and also learn machine adjustments to ensure consistent results. The students will be taught procedures for analyzing chemicals to ensure proper amounts of chemicals and water are present in a solution and how to determine the solutions degree of alkalinity or acidity. They also learn how to use a densitometer to obtain needed data for plotting and interpretation. A practical exercise will be conducted to check learning and reinforce concepts of color printing quality control. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 3 (Ref: 003-004).

REFERENCES:

AFIS-BSP, Functional Area 3, "Photographic Assignments, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 3
PHOTOGRAPHIC ASSIGNMENTS

TPFN: AFIS-BSP-003-003-

UNIT TITLE: Quality Control

TPFN HOURS AND TYPE: 2L, 3PE

TPFN TOTAL HOURS: 5

PREREQUISITE TPFN: AFIS-BSP-003-002

- TASK(S):**
- 001 Visually evaluate photographic products for mechanical and chemical defects.
 - 002 Evaluate accomplishments of photographic and laboratory assignments: quality assurance (QA).
 - 003 Identify principles of replenishing photographic solutions.

SUMMARY OF INSTRUCTION: As part of the QA process, students learn to evaluate photographic products and work assignments and the procedures for spotting/retouching prints. As part of the QA process, students learn techniques and procedures to produce controlled results and also learn machine adjustments to ensure consistent results. The students will be taught procedures for analyzing chemicals to ensure proper amounts of chemicals and water are present in a solution and how to determine the solutions degree of alkalinity or acidity. They also learn how to use a densitometer to obtain needed data for plotting and interpretation. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 3 (Ref: 003-004).

REFERENCES:

AFIS-BSP, Functional Area 3, "Photographic Assignments, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 3
PHOTOGRAPHIC ASSIGNMENTS

TPFN: AFIS-BSP-003-004-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW, 6EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-003-001 to -003

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 003-001 through TPFN AFIS-BSP 003-003. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 3, "Photographic Assignments, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-001-

UNIT TITLE: Introduction to Electronic Imaging Systems

TPFN HOURS AND TYPE: 3L, 1D, 3PE

TPFN TOTAL HOURS: 7

PREREQUISITE TPFN: None

TASK(S):

001	Identify DoD guidelines, ethical standards, copyright restrictions, and other legal issues affected by electronic imaging processes.
002	Identify and describe the characteristics of computers.
003	Identify and describe the principles of electronic imaging.
004	Operate a Macintosh computer and peripherals.
005	Use computer operating systems.
006	Use storage devices to archive images.
006	Perform operator maintenance on electronic imaging equipment.

SUMMARY OF INSTRUCTION: Students will learn DoD guidelines for ethical image enhancement and alteration and the basics of operating a Macintosh computer and peripherals as an introduction to electronic imaging. A practical exercise will be conducted to check learning and reinforce concepts of computer fundamentals, Macintosh computer operating systems, and image storage systems. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 4 (Ref: 004-006).

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook," EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-002-

UNIT TITLE: Image Enhancement Software

TPFN HOURS AND TYPE: 2L, 1D, 7PE

TPFN TOTAL HOURS: 10

PREREQUISITE TPFN: AFIS-BSP-004-001

TASK(S):

001	Identify the characteristics and principles of image enhancement software.
002	Use imaging software to crop, enhance, and resize a captured digital photograph.

SUMMARY OF INSTRUCTION: Students will learn the basics of image enhancement/manipulation software to color correct, resize, adjust contrast, brightness/contrast, and save digital images. A practical exercise will be conducted to check learning and reinforce concepts of image enhancement software. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 4 (Ref: 004-006).

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook," EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-003-

UNIT TITLE: Automated Digital Color Printing

TPFN HOURS AND TYPE: 1.5L, 1D, 5.5PE

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-004-002

TASK(S): 001 Output digital images to a printer-processor.

SUMMARY OF INSTRUCTION: Students learn the basic principles of image output devices including inkjet, dye sublimation and color laser printers. A practical exercise will be conducted to check learning and reinforce concepts of color output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 4 (Ref: 004-006).

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook", EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-004-

UNIT TITLE: Digital Camera

TPFN HOURS AND TYPE: 2L, 1D, 12PE

TPFN TOTAL HOURS: 15

PREREQUISITE TPFN: AFIS-BSP-004-003

TASK(S):

001	Describe the characteristics of electronic charged coupled devices (CCDs)
002	Use digital camera to record images.
003	Use electronic flash with a digital camera.

SUMMARY OF INSTRUCTION: Students will learn the characteristics of linear and array CCD's and digital cameras. Practical exercises will be conducted to check learning and reinforce concepts of digital photography, electronic flash, electronic imaging systems, output devices, image acquisition and enhancement, and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 4 (Ref: 004-006).

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook", EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-005-

UNIT TITLE: Digital Photography

TPFN HOURS AND TYPE: 1L, 15PE

TPFN TOTAL HOURS: 16

PREREQUISITE TPFN: AFIS-BSP-004-004

TASK(S):

001	Photograph, print, and mount a feature photo assignment.
002	Photograph and print a training activity assignment.
003	Photograph, print and mount a personality photo assignment.

SUMMARY OF INSTRUCTION: Students will learn to shoot, process, print and mount different assignments. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 4 (Ref: 004-006).

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook," EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 4
INTRODUCTION TO DIGITAL PHOTOGRAPHY

TPFN: AFIS-BSP-004-006-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW; 6EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-004-001 to -005

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 004-001 through TPFN AFIS-BSP 004-005. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 4, "Introduction to Digital Photography, Study Guide and Workbook", EIC Student Guide and Workbook
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 5
DIGITAL STUDIO PHOTOGRAPHY

TPFN: AFIS-BSP-005-001-

UNIT TITLE: Studio Photography

TPFN HOURS AND TYPE: 2L, 1D, 4PE

TPFN TOTAL HOURS: 7

PREREQUISITE TPFN: None

- TASK(S):**
- 001 Identify the principles of studio lighting.
 - 002 Identify the fundamentals of interpersonal communications.
 - 003 Use flash meter to determine single flash, multi-flash, and cumulative flash exposure techniques
 - 004 Use light meter to read incident light intensity.
 - 005 Use flash guide numbers to calculate exposures.
 - 006 Perform operator maintenance on lighting equipment.

SUMMARY OF INSTRUCTION: Students will learn studio photography from the psychological aspect through the technical methods. They will be taught how to take a variety of exposure meter readings under different lighting conditions, multiple lighting setup and balancing, and various lighting and posing techniques. Lighting ratios and military portrait posing will be emphasized. A demonstration will be conducted to reinforce concepts of digital cameras, studio electronic flash, military portraiture, and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 5 (Ref: 005-004).

REFERENCES:

AFIS-BSP, Functional Area 5, "Digital Studio Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 5
DIGITAL STUDIO PHOTOGRAPHY

TPFN: AFIS-BSP-005-002-

UNIT TITLE: Posing Techniques

TPFN HOURS AND TYPE: 1L; 2CAI; 2D; 34PE

TPFN TOTAL HOURS: 39

PREREQUISITE TPFN: AFIS-BSP-005-001

TASK(S):

001	Use posing techniques to take formal military portraiture.
002	Use posing techniques to take full-length photographs.
003	Use posing techniques to take passport photographs.
004	Use posing techniques to take special application portraiture.

SUMMARY OF INSTRUCTION: Students will set up and use common head and shoulder and full length posing using multiple lighting techniques to shoot military style photographs. Passport photograph requirements will be discussed. Practical exercises will be conducted to check learning and reinforce concepts of digital cameras, studio electronic flash, military portraiture, passport photography, and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 5 (Ref: 005-004).

REFERENCES:

AFIS-BSP, Functional Area 5, "Digital Studio Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, CAI, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 5
DIGITAL STUDIO PHOTOGRAPHY

TPFN: AFIS-BSP-005-003-

UNIT TITLE: Automated Digital Color Printing

TPFN HOURS AND TYPE: 1L, 1D, 2PE

TPFN TOTAL HOURS: 4

PREREQUISITE TPFN: AFIS-BSP-005-002

TASK(S): 001 Output digital images to a printer-processor.
002 Output digital images to a thermal dye sublimation printer.

SUMMARY OF INSTRUCTION Students will learn basic concepts of hybrid and dye sublimation printers to output studio portraits. A practical exercise will be conducted to check learning and reinforce concepts of digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 5 (Ref: 005-004).

REFERENCES:

AFIS-BSP, Functional Area 5, "Digital Studio Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 5
DIGITAL STUDIO PHOTOGRAPHY

TPFN: AFIS-BSP-005-004-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW; 4EP

TPFN TOTAL HOURS: 6

PREREQUISITE TPFN: AFIS-BSP-005-001 to 003

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 005-001 through TPFN AFIS-BSP 005-003. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 5, "Digital Studio Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-001-

UNIT TITLE: Electronic Image Copy/Acquisition

TPFN HOURS AND TYPE: 2L, 1D, 8PE

TPFN TOTAL HOURS: 11

PREREQUISITE TPFN: None

TASK(S):

- 001 Identify copyright restrictions governing reproduction.
- 002 Acquire an image using a film scanner, flatbed scanner, computer workstation and image editing software.
- 003 Output an image to a CD writer.
- 004 Use lighting techniques to digitally acquire large-scale maps.
- 005 Use digital technology to reproduce line drawings and continuous tone prints.

SUMMARY OF INSTRUCTION: Students will learn about scanner principles and techniques as regulations describing ethical image enhancement are reinforced. Students learn how to use computer peripherals to digitize film, flat art, and large scale originals. A practical exercise will be conducted to check learning and reinforce concepts of flatbed scanners, copying large originals and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 6 (Ref: 006-006).

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-002-

UNIT TITLE: Digital Output Devices

TPFN HOURS AND TYPE: 2L, 1D, 8PE

TPFN TOTAL HOURS: 11

PREREQUISITE TPFN: AFIS-BSP-006-001

- TASK(S):**
- 001 Use laser, dye sublimation, thermal and ink jet printers to output digital images.
 - 002 Identify the procedures associated with color calibration and color management of monitors and output devices.
 - 003 Photograph military training using a digital camera.

SUMMARY OF INSTRUCTION: Students learn principles of output devices and how to calibrate input and output devices. Documentation of military training using digital cameras will be emphasized. A practical exercise will be conducted to check learning and reinforce concepts of digital cameras, documentary photography and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 6 (Ref: 006-006).

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-003-

UNIT TITLE: Computer Systems Management

TPFN HOURS AND TYPE: 2L

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: AFIS-BSP-006-002

TASK(S): 001 Discuss local area network (LAN).
002 Discuss file management.

SUMMARY OF INSTRUCTION: Students will learn file management and establishment of telecommunications over modem, data transmission error correction, data compression for transmission, and file transfer. Students will also learn Wide Area Network (WAN), Local Area Network (LAN) and Internet architecture. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 6 (Ref: 006-006).

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-004-

UNIT TITLE: Software Applications

TPFN HOURS AND TYPE: 4L, 2D, 26PE

TPFN TOTAL HOURS: 32

PREREQUISITE TPFN: AFIS-BSP-006-003

TASK(S): 001 Use and identify characteristics and principles of illustration software.
002 Use and identify characteristics and principles of layout software.

SUMMARY OF INSTRUCTION: Students will learn and use electronic multi-media presentation software to create presentations. Layout software will be taught to lay out picture stories in the following unit. A practical exercise will be conducted to check learning and reinforce concepts of digital cameras, documentary photography, presentation software and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 6 (Ref: 006-006).

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L,D); 1:6 (PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-005-

UNIT TITLE: Picture Story Assignment

TPFN HOURS AND TYPE: 2L, 38PE

TPFN TOTAL HOURS: 40

PREREQUISITE TPFN: AFIS-BSP-006-004

- TASK(S):**
- 001 Identify procedures necessary to coordinate/research mission requirements.
 - 002 Develop story idea pictorially and plan a shooting script.
 - 003 Select equipment to photograph assignment.
 - 004 Photograph a scripted story idea applying controlled and uncontrolled action techniques.
 - 005 Use layout software to assemble a picture story presentation.

SUMMARY OF INSTRUCTION: Students will learn the basics of documentary and photojournalistic photography to include documentation techniques and caption writing to research, shoot, and lay out a picture story. A practical exercise will be conducted to check learning and reinforce concepts of digital cameras, documentary photography and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 6 (Ref: 006-006).

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 6
ELECTRONIC IMAGING

TPFN: AFIS-BSP-006-006-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW, 6 EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-006-001 to -005

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 006-001 through TPFN AFIS-BSP 006-005. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 6, "Electronic Imaging, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 7
OPERATIONAL PHOTOGRAPHY

TPFN: AFIS-BSP-007-001-

UNIT TITLE: Combat Camera

TPFN HOURS AND TYPE: 2L, 13PE

TPFN TOTAL HOURS: 15

PREREQUISITE TPFN: None

TASK(S):

001	Identify the principles of combat still documentation.
002	Identify the basic facts about the use of night vision applications.
003	Identify considerations of climatic extremes/conditions.
004	Identify operator maintenance procedures for equipment exposed to climatic extremes.
005	Photograph military training using a digital camera.

SUMMARY OF INSTRUCTION: Students will learn the principles of combat still documentation to include night vision applications. They will also be taught how to use and maintain photographic equipment under different climatic conditions. A practical exercise will be conducted to check learning and reinforce concepts of digital cameras, documentary photography caption writing, file management and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 7 (Ref: 007-005).

REFERENCES:

AFIS-BSP, Functional Area 7, "Operational Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 7
OPERATIONAL PHOTOGRAPHY

TPFN: AFIS-BSP-007-002-

UNIT TITLE: Electronic Image Telecommunications

TPFN HOURS AND TYPE: 1.5L, 1D, 13.5PE

TPFN TOTAL HOURS: 16

PREREQUISITE TPFN: AFIS-BSP-007-001

- TASK(S):**
- 001 Define and describe telecommunications techniques.
 - 002 Identify characteristics and principles of networks.
 - 003 Discuss compressed/non-compressed file formats.
 - 004 Compress and decompress archived images.
 - 005 Discuss telecommunication transfer using satellite up-link/
down-link and radio methods
 - 006 Transmit images via Landline (modem).
 - 007 Download images from File Transfer Protocol/web sites.

SUMMARY OF INSTRUCTION: Students extend their fundamental electronic imaging training as they learn system management, establishment of telecommunications, and file formats and compression. A practical exercise will be conducted to apply learned principles of image acquisition, file management, formats, compression, and telecommunications. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 7 (Ref: 007-005).

REFERENCES:

AFIS-BSP, Functional Area 7, "Operational Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 7
OPERATIONAL PHOTOGRAPHY

TPFN: AFIS-BSP-007-003-

UNIT TITLE: Joint Combat Camera Operations Photographic Assignment

TPFN HOURS AND TYPE: 1L, 7PE

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-007-002

TASK(S):

001	Use electronic imaging equipment to document military operations.
002	Print and transmit images from a field environment.
003	Prepare post deployment after-action and damage assessment reports.

SUMMARY OF INSTRUCTION: Students will document military operations in a remote location and produce imagery for a local authority as well as transmitting imagery back to DINFOS to be used for AAR and damage assessment reports. The practical exercise will be conducted to check learning and reinforce concepts of digital cameras, caption writing, documentary photography and digital output devices. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 7 (Ref: 007-005).

REFERENCES:

AFIS-BSP, Functional Area 7, "Operational Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 7
OPERATIONAL PHOTOGRAPHY

TPFN: AFIS-BSP-007-004-

UNIT TITLE: Multi-Media Software

TPFN HOURS AND TYPE: 1L, 1D, 6PE

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-007-003

TASK(S): 001 Identify the characteristics and principles of multi-media software.
002 Create an electronic multi-media presentation.

SUMMARY OF INSTRUCTION: Students learn to create electronic multi-media presentations. A practical exercise will be conducted to check learning and reinforce concepts of digital cameras, caption writing, documentary photography and multi-media software. Students must complete required reading and attain a minimum score of 70% on written and performance exams at the completion of Functional Area 7 (Ref: 007-005).

REFERENCES:

AFIS-BSP, Functional Area 7, "Operational Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24(L, D); 1:6(PE)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 7
OPERATIONAL PHOTOGRAPHY

TPFN: AFIS-BSP-007-005-

UNIT TITLE: Functional Area Test and Critique

TPFN HOURS AND TYPE: 2EW, 6 EP

TPFN TOTAL HOURS: 8

PREREQUISITE TPFN: AFIS-BSP-007-001 to -004

TASK(S): 001 Written Test.
002 Performance Test.

SUMMARY OF INSTRUCTION: Students will complete a written test covering tasks from TPFN AFIS-BSP 007-001 through TPFN AFIS-BSP 007-004. Upon successful completion of the written test, students will complete a performance test covering selected tasks from the same TPFNs. Students must attain a minimum grade of 70 on the written test. A minimum of 70 percent must be attained on the performance test.

REFERENCES:

AFIS-BSP, Functional Area 7, "Operational Photography, Study Guide and Workbook"
Photography, 6th ed., Addison-Wesley Educational Publishers, 1998, London, Barbara, and John Upton, EIC Student Guide and Workbook

INSTRUCTOR/STUDENT RATIO: 1:24 (EW); 1:6 (EP)

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.

FUNCTIONAL AREA 8
COURSE ADMINISTRATION

TPFN: AFIS-BSP-008-001

UNIT TITLE: Course Administration

TPFN HOURS AND TYPE: 2AD

TPFN TOTAL HOURS: 2

PREREQUISITE TPFN: None

TASK(S): 001 Inprocessing.
 002 Course critique.
 003 Outprocessing.
 004 Graduation.

SUMMARY OF INSTRUCTION: Self-explanatory.

REFERENCES: DINFOS Policy and Procedures Manual

INSTRUCTOR/STUDENT RATIO: N/A

SAFETY FACTORS: Students must apply all safety precautions when working with chemical, electrical, mechanical, and physical hazards.